tv

PIXEL PLUS

PHILIPS

Contents

Help?

If this instruction manual does not give an answer or if 'Tips' do not solve your TV problem, you can call your Local Philips Customer or Service Centre. See the supplied World-wide guarantee booklet.
Please, have the Model and Product number which you can find at the back of your television set or on the packaging, ready, before calling the Philips helpline.

Model: 34PT9421 /93
Product No: ....

Due to continuous product improvements this manual is subject to change without notice.

♲ End of life directives

Philips is paying a lot of attention to producing environmentally-friendly in green focal areas. Your new TV contains materials which can be recycled and reused. At the end of its life specialised companies can dismantle the discarded TV to concentrate the reusable materials and to minimise the amount of materials to be disposed of.
Your TV contains a (tolerated) small amount of mercury. Please ensure you dispose of your old TV according to local regulations.

Preparation

1 Place the TV on a solid surface.
For ventilation, leave at least 5 cm free all around the TV.

min.
1m
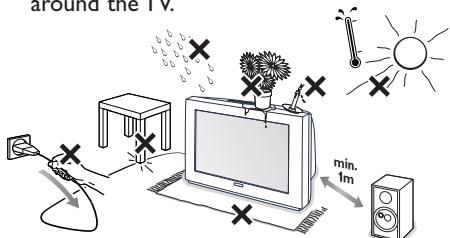
Do not place the TV on a carpet.
To prevent any unsafe situations, do not place any objects on top of the TV. Avoid heat, direct sunlight and exposure to rain or water. Keep mobile telephones at a safe distance to avoid disturbances in picture and sound.

**2** Insert the aerial plug firmly into the aerial socket ⊤⊤ at the back of the TV. For best picture quality use the suppressor-aerial cable supplied.

3 **Remote control**: Remove the cover of the battery compartment.
Insert the 2 batteries supplied (Type R6-1,5V).
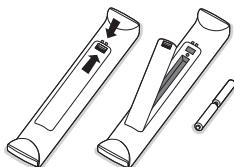
The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many countries exhausted batteries may not be disposed of with your household waste.

Please check on how to dispose of exhausted batteries according to local regulations.
*Note: this remote control functions with TVs and other equipment which use the RC6 signalling standard.*

4 Insert the mains plug of the TV in the wall socket having a mains voltage of 220V-240V. To prevent damaging the mains (AC) cord which could cause a fire or electric shock, do not place the TV on the cord.

5 **Switch the TV on**: Press the power switch ① on the front of your TV.
A green indicator on the front of the TV lights up and the screen comes on.
If the indicator is red, press the **-P+** keys on the remote control.

The green lamp blinks every time you press a key on the remote control.
*When you switch on your set for the first time, the menu **Language** automatically appears on the screen. The explanation appears in different languages one at a time.*
*Choose your own language and press the **OK** key on the remote control.*

Keys on top of the TV
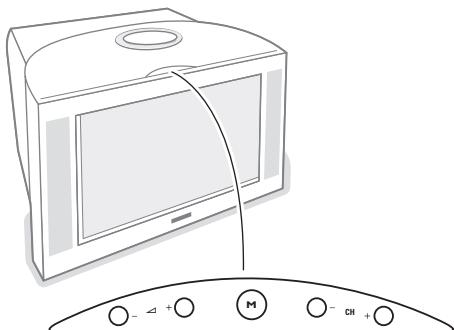
Should your remote be lost or broken you can still change some of the basic settings with the keys on top of your TV.

Press
- the ◿ - or + key to adjust the volume.
- the **CH-** and **+** key to browse through the TV channels or sources stored and to select them.
- the **M** key to summon the main menu.

Use
- the ◿ - and + keys to select the menu items in the horizontal axis.
- the **CH-** and **+** keys to select submenu items in the vertical axis.

Note:
*- Sometimes not all the menu items are visible on the screen. Press the **CH-** key to reveal all items.*
*- **Exit** lets you dismiss the menu.*
*Select **Exit** and press the **M** key.*

2

Use of the remote control RC4301

*Note: For most keys pressing a key once will activate the function. Pressing a second time will de-activate it. When a key enables multiple options, a small list will be shown. Press repeatedly to select the next item in the list. The list will be removed automatically after 6 seconds or press **OK** to remove immediately.*

VCR DVD SAT AMP CD

See 'Audio- and Video equipment keys', p. 22.

⊡ Select peripherals

See p. 22.

● ◄◄ ■ ► ►►
Video equipment keys, see p. 22.

⊙ Time display

The time is displayed on the screen.

⟨⟩ Surround mode

Press this key repeatedly to select another available surround mode: Stereo, Dolby 3 Stereo, 3D Surround, Hall or Dolby Pro Logic.

⊡ no function

⊡ no function
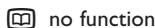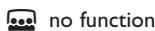
OK Press this key
• to activate your choice, when in the menus.
• to display the channel list.

►I◄ Freeze

To activate/de-activate the frozen picture and to hold a teletext page (see p. 16).

i+ On Screen information

Press to display (when available) information about the selected TV channel and programme and the strength of the signal you are receiving through your aerial.

Menu info

When a menu is on screen, press i+ to display info on the selected menu item.
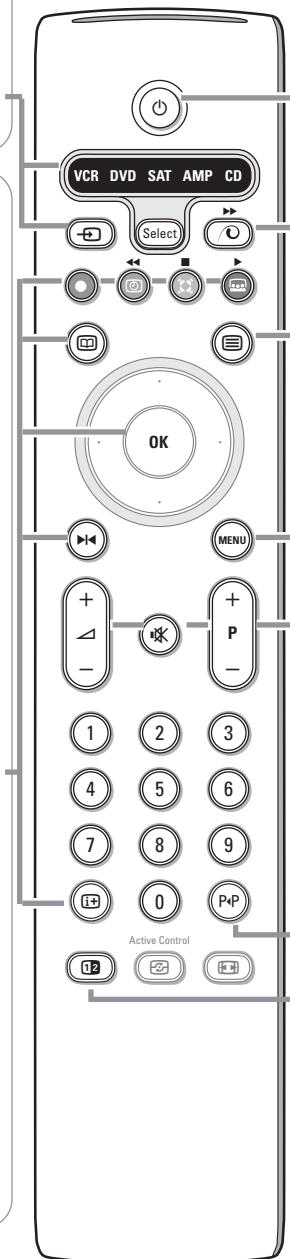
⏻ Standby

Press to switch the TV on or off. When switched off, a red indicator on the TV lights up.

↻ Pixel Plus 2 demo on/off

In the right part of the screen Pixel Plus 2 and Digital Natural Motion are switched on.

▤ Teletext On/Off see p. 15

MENU Main menu on/off see p. 5
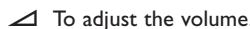
◿ To adjust the volume.

⊠ Interrupt the sound or restore it.

P Channel selection

To browse through the TV channels and sources stored. Only those channels which are in the favourite list can be selected with the **-P+** keys.

0/9 Digit keys

To select a TV channel. For a two digit programme number, enter the second digit within 2 seconds. To switch immediately to a selected one digit TV channel, keep the digit key pressed a bit longer.

⑫ Dual screen/PIP/Multipip

see p. 14.

3
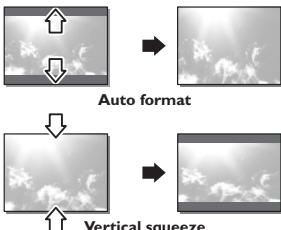
⟲ Active control

Active control is a pro-active and automatic system. The TV continuously measures and corrects all incoming signals in order to provide the best picture possible. Thanks to the Ambient Light Sensor which measures the light conditions of the room, the contrast, dynamic contrast, brightness and colour picture settings are adjusted automatically. The light sensor is active when the Active control function is switched to Medium or Maximum.

Press the ⟲ key repeatedly to select the Active Control values Off, Minimum, Medium (recommended) or Maximum.

Off Sharpness and Dynamic Contrast are controlled automatically.

Minimum Sharpness, Dynamic Contrast and Noise Reduction are controlled automatically.

Medium Sharpness, Dynamic Contrast, Noise reduction and Colour are controlled automatically.

Maximum Sharpness, Dynamic Contrast, Noise reduction, Colour and Contrast are controlled automatically.

Press the cursor right to select **INFO+**.

The Active Control demo menu appears.

The picture settings are being adapted continuously and automatically.

The menu items cannot be selected.

The sliders will be moving, showing how the TV is tweaking the current picture. None of the sliders is user controllable.

Press the **OK** key to switch off the Demo.

P⟨P Smart surf

With this feature you can easily switch between up to 9 different TV channels/sources.

In the menu system, you can set Smart surf to 2- or 9-programme. Press this key to select the previously viewed TV channel or source in case of a 2 programme surf, or to select the surf ring in case of a 9 programme surf.

In case of a 9 programme surf, a list appears at the right side of the screen. On top, the most recent programme is displayed. The puck is on the channel number currently viewed.

Press the P⟨P key to turn to the next channel in the list or press cursor up/down to immediately select the desired TV channel of the list.

To add a new channel or source: tune to the channel or source you wish to add.

Press the P⟨P key. Press the cursor right to add.

If there are already nine channels/sources in the list, the one at the bottom of the list will be removed.

To remove a channel or source: select the channel number you want to remove.

Press the P⟨P key. Press the cursor right to remove.

Press the **OK** key or wait for the time out to dismiss the Smart surf display.

⊡ Picture format

Press this key repeatedly to select another picture format: Auto format, 4:3 or Vertical squeeze.

Auto format makes the picture fill the screen as much as possible.

Vertical squeeze squeezes the picture to a wide screen picture format.

Auto format

Vertical squeeze

To use the menus

cursor to select adjustments

OK key to activate

return or switch main menu on/off
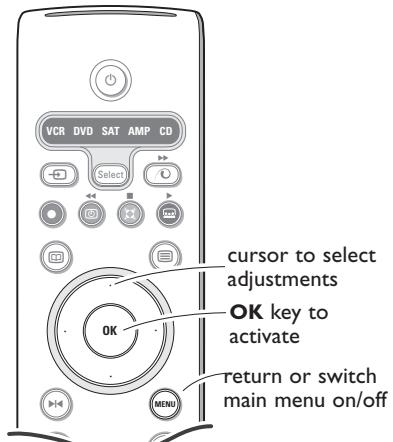
Press the i+ key to get information about the selected menu item.

❶ Press the **MENU** key on the remote control to summon the main menu. At any moment you can exit the menu by pressing the **MENU** key again.
Note: Should your remote control be lost or broken you can still use the keys on top of the TV. See p. 2.
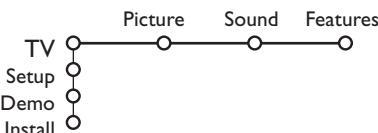
❷ Use the cursor in the up/down direction to select the **TV**, **Setup, Demo** or **Install** menu.
Use the cursor left/right to select **Picture**, **Sound** or **Features**.
Note: Sometimes not all the menu items are visible on the screen (indicated by a cluster of blue balls). Use the cursor down or right to reveal all items.

❸ Use the cursor in the left/right direction to select the menu item.

❹ Use the cursor up/down again to select the control you want to select or to adjust.

Note: Items temporary not available or not relevant are displayed in a light grey colour and cannot be selected.

Installation

The installation menu contains the following items:

Select the menu language
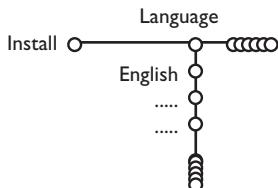
❶ Press the **MENU** key on the remote control.

❷ Use the cursor down to select **Install**.

❸ Use the cursor right to select **Language**.
Follow the instructions on screen.

❹ Use the cursor up/down to select your preferred language and press the **OK** key to confirm your selection.

❺ Proceed with the **Install** menu.

5

Store TV channels

After language is set correctly, you can now search for and store the TV channels in two different ways: using Automatic Installation or Manual Installation (tuning-in channel by channel).
Select your choice with the cursor right.

Automatic installation

Automatic install

Install ○──◎◎──○──◎◎◎

Install ○──○ Start
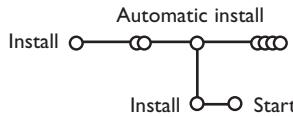
❶ Select **Automatic install** in the Install menu.
  Note: All channels must be unlocked in order to autoprogram. If requested, enter your code to unlock all channels. (See TV, Features menu, Childlock, p. 13.)

❷ Press the cursor down.
  The autoprogramming option label **Start** appears.

❸ Press the cursor right.

❹ The message **Searching** appears and the progress of autoprogramming is displayed.

When the Automatic installation is complete, the puck navigates to Install again.
The channel list is automatically filled with all the channel numbers of the TV channels transmitted.

Note: Channel numbers and names will always be written in Latin characters, even when a language has been selected which uses other characters.

Manual installation

Manual install

Install ○──◎◎──○──◎◎◎
System ○
Channel ○
Search ○
Fine tune ○
Antenna level ○
Store ○
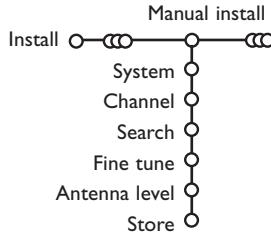
Searching for and storing TV channels is done channel by channel. You must go **through every step** of the Manual Installation menu.

❶ Select **Manual install** in the Install menu.

❷ Press the cursor down.
  Follow the instructions on screen.

  Note: Search or direct selection of a TV channel.
  If you know the frequency, the C- or S-channel number, enter the 3 or 2 digits of the frequency or the channel number directly with the digit keys 0 to 9 (e.g. 048).

  Repeat to search for another TV channel after you have stored the selected TV channel.

Give name
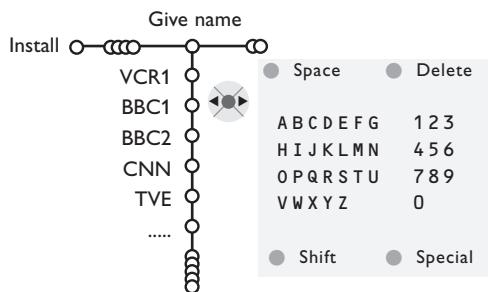
It is possible to change the name stored in the memory or to assign a name to a TV channel or external for which a name has not yet been entered. A name with up to 5 letters or numbers can be given to the channel numbers 0 to 99 and to the externals.

**1** Select **Give Name** in the Install menu and press the cursor down.

2 Select the channel number.
Note: keep the cursor up/down pressed to scroll through the channel list quickly.

3 Press the cursor right.
A keyboard appears on the screen. Only European characters are displayed.

Press the cursor right to enter the keyboard. Press the cursor up/down, left/right to select the first character and press **OK**. Repeat for every character you want to enter.
Select **Space** to enter a space; **Delete** to erase the highlighted character in the name entered; **Shift** to display upper- or lowercase characters on the keyboard; **Special** to display special characters on the keyboard. Press **OK** to confirm.

4 Press the cursor left repeatedly when you have finished the name giving.

5 Select another channel number and repeat steps **3** to **4**.

Reshuffle the channel list
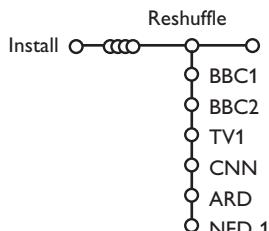
You can change the order of the stored TV channels.

1 Select **Reshuffle** in the Installation menu.

2 Follow the instructions on screen.

Select Favourite TV channels
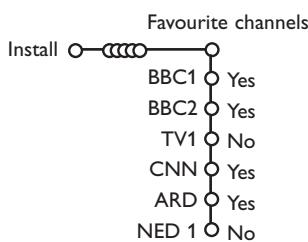
1 Select **Favourite channels** in the Install menu.

2 Select your channel number with the cursor up/down.

3 Select **Yes** or **No** with the cursor right.

4 Repeat **2** and **3** for every TV channel or external you want to make a favourite or a non-favourite TV channel or external.

```
                    Speakers  General  Source
Setup ○─────────────○────────○─────────○
                    ○  Test tone
                    ○  Front left volume
                    ○  Front right volume
                    ○  (Centre volume)
                    ○  (Surround volume)
                    ○  Centre mode
                    ○  Surround speakers
                    ○  Auto surround
```
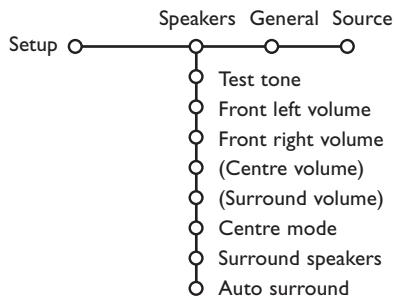
The Setup menu contains items that control the settings of the TV's functions, features, services and peripherals you may have connected.

The **Speakers** menu reflects the speaker-related controls.
The **General** menu allows you to change settings that will typically be accessed only occasionally.
The **Source** menu allows you to select a source and/or to name each input source.

Speakers

Availability of Speaker menu items

	Stereo	3 Stereo	3D Surround	Hall	Pro Logic
Test tone	•	•	•	•	•
Front left volume	•	•	•	•	•
Front right volume	•	•	•	•	•
Centre volume		•	•		•
Surround volume				•	•
Centre mode	•	•	•	•	•
Surround speakers				•	•

In order to receive the full reproduction capability of true Dolby Surround Sound you should include the proper use and arrangement of the speakers:
 • via the TV and its internal Front right, Centre and Left speakers and two amplified rear surround speakers connected to the back of the TV;
 • or via the Variable Line Out connectors and an external Dolby amplifier. See External speakers/Amplifier, p. 21.

Select the various Speakers menu controls to setup the configuration of the TV's speakers system for Dolby audio playback.
Each volume control can be adjusted to match test tone levels. Depending on the output and Surround mode (see Main menu, TV, Surround, Sound mode, p. 12) selected, some menu items may be greyed out and are not selectable.

Test tone and Volume controls

The menu item Test tone enables you to have a reference of the speakers loudness and to adjust the level of each until they are balanced in loudness. The speakers activated light up in the screen graphic.

1 Select **Test tone** with the cursor down.

2 Press the cursor right to select **On** or **Off**.

3 When turned **On**, the Test Tone control generates a sound test signal that circulates through the individual active speakers in a clockwise direction, and is meant to be used with the adjustable volume controls.
Once turned on, the Test Tone will continue to circulate through the Left, Centre, Right and both Rear surround speakers (if present).

4 Press the cursor up/down to select the desired speaker for individual volume level adjustment.

5 Press the cursor left/right to adjust the volume level.

6 Continue and select the other speakers for adjustment as desired.

7 Press the cursor up to return to the Test Tone menu item when speaker adjustments are complete and turn the control Off.

Centre Mode

See Connect Peripheral Equipment, External Speakers, Amplifier, p. 21.
If no external amplifier with front speakers is connected, do not change the predefined factory settings which is **Centre mode No**. If an external amplifier with front speakers is connected, select **Centre mode Yes**.
In this setting, the centre channel in surround mode is directed to all three internal TV speakers (left, centre and right).

Surround Speakers

See Connect Peripheral Equipment, External Speakers, p. 21. If no Surround Speakers are connected do not change the predefined factory settings which is Off. If Surround Speakers are connected select On.
*Dolby Pro Logic and Hall are not available if Off is selected.*

Auto Surround

Sometimes the broadcaster transmits special signals for Surround Sound encoded programmes.
The TV automatically switches to the best surround sound mode when **Auto Surround** is switched **On**.
However it is possible to overwrite this setting.

General

```
                    General
Setup  O───────────O
Menu background  O
      Smart surf  O
     PIP format  O
Factory settings  O
      Tilt adjust  O
            OSD  O
Programme title  O
   Teletext 2.5  O
Set/Change code  O
          Colour  O
            PLL  O
```

This menu allows you to change various settings that are presumably adjusted less frequently than most other settings.

Press the ⌊i+⌋ key on the remote control to get information about the selected menu item.

PIP format

This menu allows you to select the preferred format which can then be displayed toggling the ⌊12⌋ key on and off.

❶ Select **PIP format** with the cursor down.

❷ Press the cursor right.

❸ Select **Dual screen**, **PIP**, **PIP 3** or **PIP 6** with the cursor down. When Dual screen mode is activated with the remote control ⌊12⌋ key, and when
  • **Dual screen** is selected, the TV splits the screen into two equally sized screens.
  • **PIP** is selected, the TV shows a full screen of video with a pip window of video on top if it;
  • **PIP3** or **PIP6** is selected, the TV will display the main screen together with 3 or 6 pip screens. See also p. 14.

Source

Source

Setup O——O——O——O
　　　　　　　AV1 O
　　　　　　　AV2 O
　　　　　　　AV3 O
　　　　　　　AV4 O
　　　　　　　Side O

This menu allows you to select the peripheral you connected to one of the external inputs.

① Select **Source** with the cursor right.

② Press the cursor down to select one of the external inputs.

③ Press the cursor right to enter the list of names of peripherals attached to the selected input.

④ Select the peripheral device with the cursor up/down.

Once you have selected the source, e.g. VCR, this AV-input will automatically be selected when your remote control is in VCR mode and when you press the ⊕ key on the remote control.

Demo

TV O
Setup O
Demo O——O Auto demo
Install O　　O Dual screen
　　　　　　O PIP
　　　　　　O Teletext
　　　　　　O Install
　　　　　　O Main menu
　　　　　　O Picture
　　　　　　O Speakers
　　　　　　O Active control
　　　　　　O Dealer demo - Digital options
　　　　　　　　　　　　　　- Light sensor
　　　　　　　　　　　　　　- 3D Y/C Comb filter
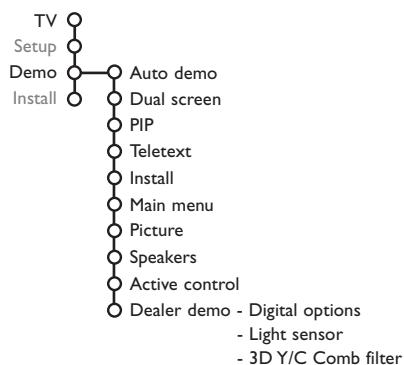
The Demo menu allows to demonstrate the TV features separately or in a continuous loop.

① Select **Demo** in the Main menu with the cursor down.

② Select **Auto demo** or one of the features with the cursor right and press the **OK** key on the remote control.
If **Auto demo** has been selected the demo will automatically present all the features sequentially in a loop.
Press one of the cursor keys to stop the Auto demo.
If one of the features has been selected, this particular feature demo will run one time only, until activated again, and the Demo menu will reappear.

Select Dealer Demo

Select **Digital options**, **Light sensor** and **3D Y/C Comb filter On** or **Off** to really see the difference in picture quality.
In Dealer Demo mode it is possible to change channels with **-P+** and to adjust the volume.

Note: the Dealer Demo is not part of the automatic sequence and can only be activated separately.

Press the **MENU** key on the remote control to summon the main menu.

Press the [i+] key on the remote control to get information about the selected menu item.

Picture

Picture

TV

Smart picture
Contrast
Brightness
Colour
Sharpness
Tint
Digital options
Dynamic contrast
DNR
Colour enhancement
(Hue)
Picture format
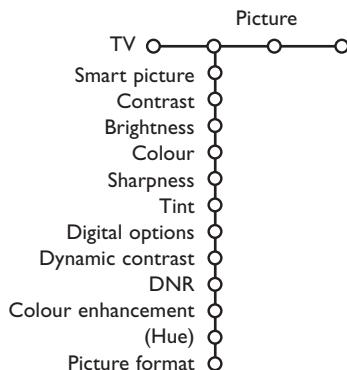
❶ Press the cursor right to select **Picture**.

❷ Select the menu items in the Picture menu with the cursor up/down.

❸ Adjust the settings with the cursor left/right or enter the list of submenu items with the cursor right. Select a submenu item with the cursor up/down.

Note: To remove the menu background before adjusting the picture settings, see Select TV setup, General, p. 9.

Smart picture

Select **Smart picture** to display a list of predefined picture settings, each corresponding with specific factory settings.
Personal refers to the personal preference settings of picture in the picture menu.
*Note: This Philips TV has been set at the factory to look best in bright store environments which use fluorescent lighting. As your home will likely not be as well lit as a store, we recommend that you cycle through the various **Smart Picture** modes to find the one that best suits your own viewing conditions. Most consumers will find that **Natural** is the correct choice. In case of weak RF/AV signals, please select **Soft**.*

Digital options with PAL signals

Pixel Plus 2 is the most ideal setting, doubles the horizontal resolution and increases the number of lines by 33%.
You may consider to select Movie Plus in case a halo effect should disturb you. Dependent on your own preference, select 100 Hz Dig. Scan.
• **100 Hz Dig. Scan** = 100 Hz + Dig. Scan (Field and line flicker reduction) without motion compensation.
• **Pixel Plus 2** = creates near High Definition performance inside the Tv on the basis of a regular input signal. The number of lines are increased and the number of pixels on a line are doubled in combination with Digital Natural Motion. As such Pixel Plus 2 enhances both regular broadcast signals and DVD or Digital Tv input towards unparalleled sharpness and depth, near High Definition and natural detail.

Digital options with NTSC signals

• Progressive Scan = line doubling eliminates line flicker.
• Movie Plus
• Pixel Plus 2

Notes:
- Pixel Plus 2 is not active when Multipip, Teletext (except when subtitling is activated) or Teletext Dual screen is selected.
- When having selected Pixel Plus 2, the size of the menus on screen is reduced. This is a normal behaviour.
- Interference, caused by fluorescent lights just above the TV, may occur when having selected Pixel Plus 2.

The modified adjustments for Contrast, Brightness, Colour, Sharpness, Tint, Digital options and Dynamic Contrast are automatically stored.
Select **Factory settings** in the Setup menu, General, to restore the predefined factory settings, see p. 9.

Sound

Sound
TV
Smart sound
Equalizer
Volume
Headphone volume
Surround mode
(Dual I-II)
(Mono/Stereo)
(Digital/Analogue)
(3D effect)
AVL
Delta volume
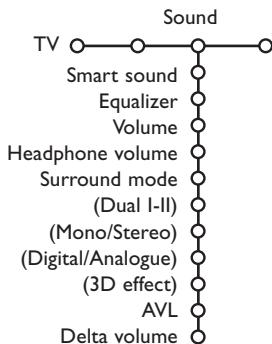
➊ Press the cursor right to select **Sound**.

➋ Select the menu items in the Sound menu with the cursor up/down and adjust the settings with the cursor left/right.Remember, control settings are at normal mid-range levels when the bar scale is centred.

Smart sound

Select Smart sound to display a list of predefined sound settings, each corresponding with specific factory settings of Treble and Bass. **Personal** refers to the personal preference settings of sound in the sound menu.

Notes:
- *Dual I-II is only selectable with dual sound transmission.*
- *Mono/Stereo is only selectable in case of analogue stereo transmission.*
- *Digital/Analogue is only selectable in case of Digital transmission.*
- *Surround modes can not be modified when a headphone has been connected.*

Surround Modes

Dependent on the sound signal broadcasted, select one of the Surround modes.

Stereo

This mode reproduces only the left and right front sound signals.
You only hear a stereo sound if the broadcast which you are receiving is transmitted in stereo or digital stereo.

Dolby 3 Stereo

(optimal with Dolby Surround broadcasting)

The sound signal is now distributed over the front left, the front right and the centre TV loudspeakers.
The rear loudspeakers do not produce any signal.

3D Surround

(optimal with Dolby Surround broadcasting)

3D Surround enables you to experience the effect of Dolby Surround Pro Logic* without the need of having rear speakers connected or activated. The graphical representation of the rear loudspeakers is replaced by the symbol ⑴ (((.
Select the level of 3D effect with the cursor left/right.

Hall
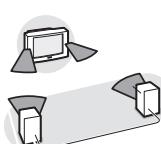
The special sound signal is distributed over the rear loudspeakers which creates a hall effect from the rear.
The centre loudspeaker does not reproduce any signal.

This mode is recommended when you wish to add surround sound to a broadcast which is not encoded Dolby Surround or to a mono signal.

Pro Logic

(with Dolby Surround broadcasting)
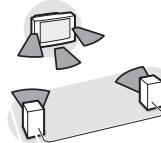
In addition to the left and right internal speakers, the centre and the rear surround loudspeakers reproduce the Dolby Surround Pro Logic sounds.

This sound is always present in the movie or programme marked with ▢▢ Dolby Surround. This mode is especially recommended for such programmes or movies.Dolby Pro Logic signals are also present on some DVD tracks.
Note: Normal stereo broadcast is not always encoded to produce a rear surround sound.

Pro Logic and Hall can only be reproduced if Surround speakers is set to Yes in the Setup, Speaker menu, p. 8, and rear speakers are connected.

With two extra front loudspeakers connected
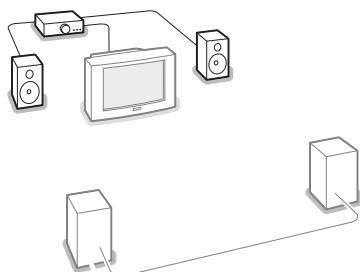
To enhance the sound reproduction of your TV you may connect two extra front loudspeakers via an external amplifier. See Connect Peripheral Equipment, Connect external speakers/amplifier, p. 21.
In the Surround modes **+ ext. amp** is added to indicate that you should switch on your amplifier as in these modes the internal TV speakers produce only centre sound. The subwoofer speaker is muted.

Note: If extra front speakers are connected and selected, all internal TV speakers produce centre sound in the surround modes Pro Logic*, Dolby 3 Stereo and 3D Surround.

* [DD] **DOLBY SURROUND**
     P R O · L O G I C
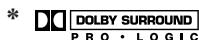
'Dolby' 'Pro Logic' and the double-D symbol [DD] are trademarks of Dolby Laboratories Licensing Corporation. Manufactured under license from Dolby Laboratories Licensing Corporation.

Features menu

```
                Features
TV  o—oo————————o
   Channel list  o
     Subtitle    o
   Sleeptimer    o   Lock
   Child lock    o—  Custom lock —— Channel lock
    On timer     o   Unlock
```
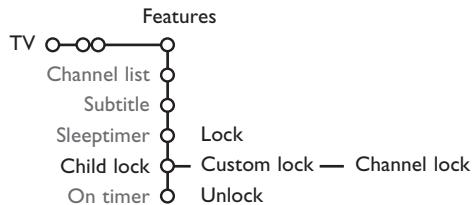
① Press the cursor right to select **Features**.

② Select the menu items with the cursor up/down and adjust the settings with the cursor left/right.

Use the on-screen Menu-Info [i+] for more information about the menu items.

Channel list

Press the **OK** key to switch over to the selected TV channel or external.

Select subtitles

The subtitle page must be stored for each TV channel:
Switch on teletext and select the proper subtitle page from the index. Switch off teletext.
Subtitle On will automatically display them on the selected TV channels if subtitles are in the transmission. A symbol will indicate that the mode is on.
Select **On during mute** when you want to have the subtitles automatically displayed only when the sound has been muted with the ⊠ key on the remote control.

Child lock

① Select **Child lock**.

② Press the cursor right to enter the Child lock menu. You're summoned to enter your code.
Note: You have to re-enter your code each time you enter the child lock menu.

Important: You have forgotten your code !

- *Select Cancel with the cursor down.*
- *Select Set/Change code in the Setup menu. See General menu, Set/Change code, p. 9.*
- *Press OK.*
- *Press the cursor right and enter the overriding code 8-8-8-8.*
- *Press the cursor again and enter a new personal 4-digit code. The previous code is erased and the new code is stored.*

Note: The overriding code only works in the Set/Change code menu.

③ Select one of the menu items of the child lock menu:
- **Lock** if you want to lock all channels and externals.
- **Custom lock** and press the cursor right. Select:
  - **Channel lock** if you want to lock a certain TV channel or external;
- **Unlock** to disable all locks you have set.

On timer

1 Select **On timer** with the cursor down.

```
                        VCR1      Sunday
                        BBC2      Monday
                Off     CNN       .......
On timer O──On ──       TVE       Daily    ── 15:45
                        ▶.....
```

2 Select **On** with the cursor right.

3 Press the cursor right again to enter the channel list.

4 Select the TV channel or external you want your TV to switch to on a selected time and day.

5 Press the cursor right again to select a day of the week or to select **Daily**.
Select Daily to set the On timer for daily operation on the selected TV channel or source.

6 Press the cursor right once again to enter the time.

7 Enter the time with the digit keys or with the cursor up/down/left/right.

8 Press the **OK** key to activate.

9 Press the **MENU** key to turn off the menu.
Note: To check your timer settings, press the [i+] *key.*

Dual screen/PIP/Multipip

Press the [12] key to switch on **Dual screen**, **PIP** or one of the PIP modes according to the format selection made in the PIP format list in the General menu. See Setup, General, p. 9.
Press the [12] key again. The screen that has a yellow border will become the full main screen picture.

Notes:
- Continuing to hold the [12] key down will cycle the TV through the various formats (Dual screen, PIP, PIP 3 or PIP 6), launching a new format after each second the key is held down. After standby of the TV, the preference as set in the Setup, General menu is used.
- It is not possible to display a VGA or HD source in a Dual screen/PIP screen.
- When Dual screen mode is selected, two picture formats are supported: Full screen or 4:3 letterbox picture format (vertical squeeze).
- Audio from the right screen or the PIP plays to the headphones.

Display options

Dual screen	PIP	PIP 3	PIP 6
◯ AUX	◯ AUX	◯ PIP1 PIP2 PIP3	PIP1 PIP4 PIP2 PIP5 PIP3 PIP6
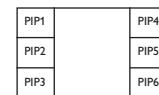
• Press the cursor right to highlight the right screen.
• Press the cursor down to highlight the single PIP screen.
• Press the cursor right to enter the Multipip screen and then use the cursor keys to navigate through the PIP screens and to highlight a PIP screen.

Changing TV channels or external sources in left, right, PIP or Multipip screen

• Press the **-P+** keys or the P◂P key or the digit keys in order to change the TV channels or external sources in the highlighted screen.

14

Scan PIP3 or PIP 6

Navigate to the lowest PIP and press the cursor down to display a following series of PIP screens.

Define the position and the size of the single PIP screen

❶ Select a Dual screen mode with a single PIP screen.

❷ Press the cursor down to highlight the PIP screen. A PIP menu appears with which you can define the position and the size of the PIP screen.
*Note: When the PIP menu times out, press the **OK** key to make it reappear.*

❸ Press the cursor down again to select **Position** or **Size**.

❹ Press the **OK** key or the cursor right to activate.

❺ Use the cursor keys to define the position of the PIP screen. Use the cursor left/right to define the size of the PIP screen.

❻ Press the **OK** key. The PIP menu reappears.

❼ Press the cursor up to the top of the menu to highlight the main screen again.

❽ Press the **OK** key to switch off the menu or wait until it is timed out.

On-Screen information

The highlighted On-Screen information, which appears when changing channels, always refers to the active screen.

Teletext   *(only English teletext supported)*

Most TV channels broadcast information via teletext. This TV has a 1200 pages memory that will store most broadcasted pages and subpages to reduce waiting time. After each programme change, the memory is refreshed. It may take some time for all pages to load.
Depending on the TV channel, teletext is transmitted in different systems. The colours used in the bottom line of the teletext page correspond with the colour keys of your remote control.

Switch Teletext on and off

Press the ▤ key to switch teletext on or off.
The main index page appears on the screen.
It shows an information line at the top, an option line at the bottom and a puck in the top left corner of the screen.

```
102      ‹‹03  04  05  06  07  08  09  10  11  12››
         BBC CEEFAX    102  Mon 05 Feb  16.35.22

            B B C      C E E F A X
LIONS RECORD ANOTHER WIN    430
Index            100    News              300
BBC Info         110    Headlines         305
Children         120    Weather           400
Cookery          150    Sports            415
Education        200    Radio             500
Lottery          230    Travel            550
Finance          240    Subtitling        888
Music            280    TV Listings       600
Red         Green          Yellow         Blue
```

Select a Teletext page

With the digit keys

Enter the desired page number with the digit keys.
The page counter seeks the page or the page appears immediately when the page number has been stored in the memory.
A message appears when you have entered a non existent or incorrect page number. Page numbers beginning with 0 or 9 do not exist. Choose another number.

With the option line

Select with the colour keys, corresponding to the coloured options at the bottom of the screen, the desired subject.

Quickly run through the teletext pages

Press the cursor up/down or the **- P +** key to run through the previous or the following pages.

Select the previously selected page

Press the P◄P key.

Note: Only possible when teletext pages are active, not when the Teletext menu is displayed.

Select the index teletext page

Press the grey colour key ▶▶ to display the main index (usually p.100).

Select subpages

When a selected teletext page consists of different subpages, one of the subpages appears on the screen.
Press the cursor right to highlight the subpagenumber. Press the cursor up/down to select the next or previous subpage or enter the subpagenumber with the digit keys.

Special teletext functions

Hold

Press ▶◀ to stop the automatically rotating of the subpages or to stop the page counter from seeking when you have entered a wrong page number or when the page is not available.
Enter another page number.

Hypertext

With hypertext you can select and search for pages containing any word or number on the current teletext page.

1 Make sure you are not in the teletext menu and that the puck is in the upper left corner of the screen.

2 Press the cursor key down to highlight the first word or a number on the page.

3 Use the cursor up/down, left/right to select the word or number you want to search for.

4 Press the **OK** key to confirm.
A message appears at the bottom of the screen to indicate that the searching is going on or that the word or page is not found.

Select Continuous Subtitles

TV channels with teletext often transmit programmes with subtitling. For each TV channel you can store a subtitle page.
Switch on teletext and select the proper subtitle page from the index.
Switch off teletext. Now the subtitle page is stored for the selected TV channel.
Select **Subtitle On** or **Off** in the Features menu, see p. 13.
The subtitle symbol ▭ appears when **Subtitle On** is selected.

Teletext menu

(only available in full screen teletext mode)

❶ Press the **MENU** key to activate the menu.

❷ Press the cursor up/down to select the menu items.

Favourite

You may create a list of eight favourite teletext pages in total, selected from various TV channels.

To add a favourite page to the list:

❶ Select a favourite teletext page.

❷ Select **Favourite** in the teletext menu and press the cursor right to enter the list.

❸ Press the cursor right again to add the page.

❹ Press the **MENU** key to watch the current page.

To watch a favourite page from the list:

When in Teletext, use the P◀P key to browse through the favourite pages of the TV channel actually selected.

Note: only the pages of the current channel can be selected.

Search

On the keyboard on screen you can type in a word you want to search for in the teletext pages. Whether upper- or lowercase is used has no influence. Searching for pagenumbers is not possible.

❶ Press the cursor left/right, up/down to select the characters, words or functions.

❷ Press the **OK** key to confirm each character selected.

❸ Select **Cancel** to cancel the word or character selected; **Space** to enter a space; **Delete** to delete the last character selected; **Shift** to switch between undercast or capital characters; **Special** to display special characters on the keyboard.

❹ Press the cursor left repeatedly to return to the Teletext menu again.

Searching a word

❶ Type in the word on screen or select a word from the history list on the right and press **OK**.

❷ Select **Accept** and press **OK** again. The message **Searching** appears. When the word is found, it is highlighted in the teletext page.

❸ To continue the search, press the **OK** key twice. When a word is not found, a message appears.

❹ To search for a new word, select **Keyboard** and press **OK**. Select the new word.

Reveal

Reveals/conceals hidden information on a page, such as solutions to riddles and puzzles. Press the **OK** key to activate. Press **OK** again to return to the Teletext menu.

Cycle subpages

Makes the subpages cycle automatically. Press the **OK** key to activate and to de-activate again.

Window text

A limited amount of text is displayed at the bottom of the screen.
Press the **OK** key to activate.
Use the cursor up/down to scroll and press the cursor left to go back to the teletext menu.

Timed page

To display a specific page at a certain time.

❶ Press the cursor right to select **Yes** or **No**.

❷ Enter the time and pagenumber with the cursor keys or the digit keys.
Note: Teletext does not have to remain switched on. It is not possible to display a timed page when the TV is switched to standby.

Press the **MENU** key to leave the Teletext menu.

Connect Peripheral Equipment

There is a wide range of audio and video equipment that can be connected to your TV. The following connection diagrams show you how to connect them to the back or the right side of the TV.

AV1 IN can handle CVBS and YPbPr; AV2 IN CVBS and Y/C; AV3 and AV4 IN digital signals of a e.g. digital HD receiver or Progressive scan DVD; Side: CVBS and Y/C.

Recorder
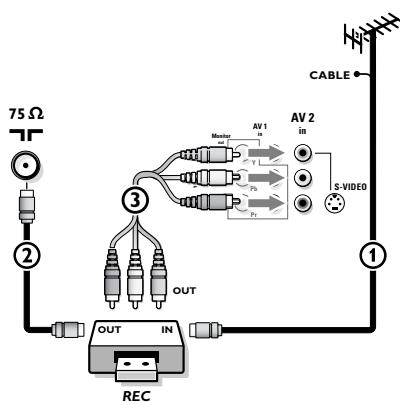
❶ Connect the RF Antenna ① to the **RF IN** socket of your recorder.

❷ Connect another RF cable ② from the output **OUT** of your recorder to the TV's input 75 Ω ⊤⊤ jack.

❸ Better playback quality can be obtained if you also connect the Video, Audio Left and Right (only for stereo equipment) AV cables ③ to the **VIDEO**, **AUDIO L** and **R** input jacks of **AV2 IN**.

If your recorder has an S-VHS video jack:

For improved picture quality, connect an S-video cable with the **S-VIDEO** input instead of connecting the recorder to the video jack of **AV2 IN**.
S-Video does not provide audio, so audio cables must still be connected to provide sound.

Recorder and other A/V peripherals
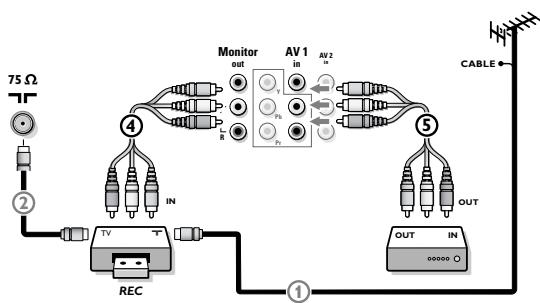
❶ Connect your recorder as described above. The **MONITOR OUT** connectors can be used to record programmes from your TV ④. See Record with your recorder, p. 23.

❷ Connect the Video, Audio left and Audio right (only for stereo equipment) cables to the **VIDEO**, **AUDIO L** and **R** input jacks of **AV1 IN** ⑤ or the side connections (see p. 20).

Note: In case of mono equipment, only the left loudspeaker reproduces sound. Use a mono to stereo adaptor (not supplied) for sound reproduction via all internal loudspeakers.

Satellite Receiver
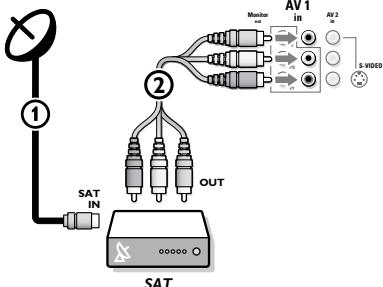
1. Connect the satellite antenna cable ① to the satellite receiver's **SATELLITE IN** jack.

2. Connect the Video, Audio left and right (only for stereo equipment), AV cables ② to the **VIDEO**, **L** and **R AUDIO** input **AV1** in jacks.

If your satellite receiver has an S-VHS video jack:

For improved picture quality, connect an S-VHS video cable with the **S-VIDEO** input instead of connecting the satellite receiver to the video jack of **AV2 IN**.

Satellite Receiver with a recorder
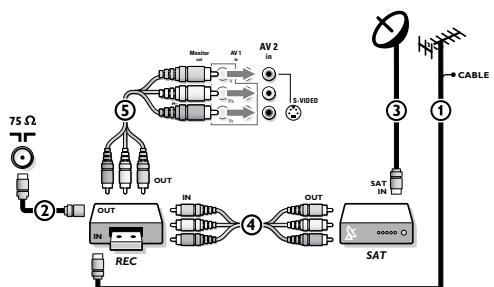
1. Connect your satellite receiver as described above.

2. Connect the RF Antenna or Cable TV cable ① to the **RF IN** socket of your recorder.

3. Connect another RF cable ② from the output of your recorder to the TV's 75 Ω ⊓ jack.

4. Connect the satellite antenna cable ③ to the satellite receiver's **SATELLITE IN** jack.

5. Connect the AV cables ④ to the satellite receiver's **AV OUT** jacks and to the VCR's **AV IN** jacks.

6. Connect the recorder's **AV OUT** jacks ⑤ to the TV's **AV2 IN** jacks.

DVD player or other accessory digital source equipment
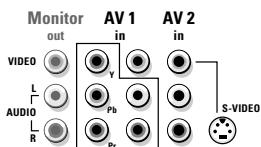
Equipment with AV connectors only

1. Connect the video cables to the equipment's **AV OUT** jacks and to the TV's **AV1** or **AV2 IN** jacks.

2. Connect the audio cables to the equipment's **AUDIO L** and **R** jacks and to the **L AUDIO** and **R AUDIO AV1** or **AV2** jacks on the TV. (According to where you connected the video cables, to **AV1** or **AV2**.)

Equipment with an S-VIDEO connector

1. Connect an S-video cable the **AV2 S-VIDEO** input.
   Note: When using the s-video connector do not connect any device to the video input.

2. Connect the audio cables to the equipment's **AUDIO L** and **R** jacks and to the **L AUDIO** and **R AUDIO AV2** jacks on the TV.

With Component Video Output Connectors

1. Connect the cables of your YPbPr equipment to the **YPbPr** input **AV1 IN** sockets on the TV.
   Note: When using the YPbPr sockets do not connect any device to the video input of AV1.
   The YPbPr sockets on the TV are compatible with 480i (interlaced, 1 Fh) output signals only, not 480p (progressive scan, 2 Fh).

2. Connect the Audio left and right (only for stereo devices) cables to the **AUDIO L** and **R** input of **AV1**.
   Warning: Never connect a signal to the Y-input and video-input at the same time. This may cause picture distortion!

Equipment with Progressive scan output (480p, 576p or 1080i 2 Fh)

Connect the equipment to the **AV3** or **AV4 IN** jacks on the TV.
See AV3 or AV4 Digital HD input, next page.

Note: The labels for the component video sockets may differ depending on the DVD player. Although the abbreviations may vary, the letters B and R stand for the blue and red component signals, respectively, and Y indicates the luminance signal. Refer to the DVD player's instructions for use for definitions and connection details.

AV3/AV4 Digital High Definition input

AV 4 IN / **AV 3 IN**

VIDEO 2Fh 480p/1080i
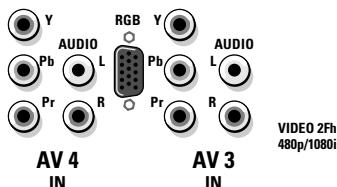
When you have a digital equipment with a 480p or 1080i output (e.g. a digital Set Top Box or Progressive DVD player), connect it to the **AV3** or **AV4 IN VIDEO** 2Fh 480p/1080i input.

Connect the equipment with 2Fh RGB output to the **RGB** connector and to the **L** and **R AUDIO** jacks of **AV3**.
Connect the equipment with 2Fh YPbPr output to the **Y**, **Pb** and **Pr** jacks and to the **L** and **R AUDIO** jacks of **AV4**.
See also the manual of your High Definition equipment.

Note: This television is designed to accept high definition signal standards 1080i and 480p as specified by the Electronic Industries Association standard EIA770.3 as well as 2Fh-signal standards 576p and 1152i.
Digital devices from different manufacturers have the possibility of differing output standards which may cause difficulties for the television to properly display.

Warning: in case you notice scrolling images, wrong colours or no colour, no picture, or even combinations of these on your screen, check if the connections are done in the right way.

*The AV3 input **can not** be used to connect a computer or any other VGA device.*

Side connections
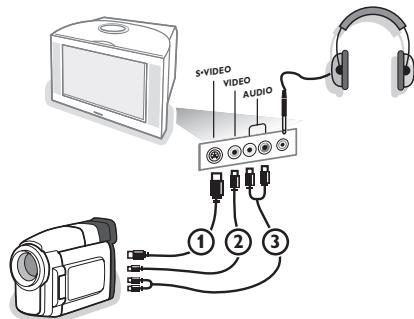
Camera or camcorder

❶ Connect your camera or camcorder to sockets at the right side of your TV.

❷ Connect the equipment to **VIDEO** ② and **AUDIO L** ③ for mono equipment. For stereo equipment also connect **AUDIO R** ③.

S-Video quality with an S-VHS, Hi-8 or Digital camcorder is obtained by connecting the S-Video cables with the **S-VIDEO** input ① (instead of **VIDEO** ②) and **AUDIO** inputs ③.

*Note: If you prefer, you can also connect the camcorder to one of the TV's rear **AV IN** jacks.*

Headphone

❶ Insert the plug into the headphone socket 🎧 at the right side of the TV.

❷ Press 🔇 on the remote control to switch off the internal loudspeakers of the TV.
The headphone impedance must be between 8 and 4000 Ohm. The headphone socket has a 3.5 mm jack.

In the **Sound** menu select **Headphone volume** to adjust the headphone volume. When the headphone is connected, the surround mode is always stereo.

Note:
When Dual screen/PIP is activated (see p. 14):
- if the main screen displays a TV channel picture, you hear the sound from the Dual screen/PIP picture through your headphone;
- if the main screen displays a picture from a peripheral equipment, you hear the sound from the main screen through your headphone.

*Note: When using the **S-VIDEO** connector do not connect any device to the video input.*

Connect external speakers/amplifier

Stereo amplifier and two extra front speakers
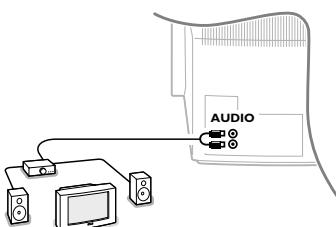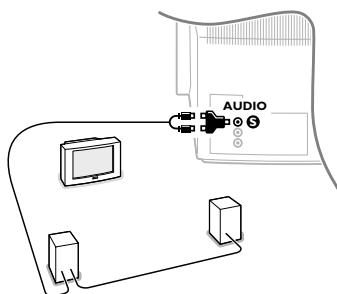
To enhance the sound reproduction of your TV you can connect two extra speakers via an external amplifier.

❶ Connect the audio cables to the audio input of your amplifier and to the **AUDIO OUT L** and **R** jacks at the back of your TV.
The output level is controlled by the volume control of your TV.
*Note: Turn off the TV and your audio amplifier before connecting them.*
Set the audio amplifier's volume to minimum.

❷ Select **Centre mode On** in the Setup menu, Speakers, see p. 8.
See Sound menu, Surround mode, p. 12 for the available Sound modes.

❸ Adjust the volume of the audio amplifier.
You may make use of the Test tone function in the Setup menu, see p. 8, to have a reference of the loudness of the separate speakers.
Note: Once you have adjusted the volume of the amplifier, do not change it while watching TV as the whole configuration operates with the volume adjustment of your TV.

Surround speakers

To enjoy Dolby Pro Logic Surround sound, you can connect two rear speakers with built in amplifiers (or an audio amplifier with rear speakers).

❶ Connect the audio cables to the rear speakers and to the Dolby surround output **S** in the **AUDIO OUT** grouping at the rear of your TV as shown above.
Note: Turn off the TV and the rear speakers before connecting them.

Rear Surround speakers should always be located behind or to either side about 1 m above the listener's head.

❷ Adjust the volume of the rear speakers.
Use the Test tone function in the Setup menu, Speakers, see p. 8, to have a reference of the loudness of the surround speakers in relation to the other speakers.
*Note: Once you have adjusted the volume of the rear speakers, do not change it while watching TV, as the whole configuration operates with the volume adjustment of your TV.*

Dolby Pro Logic Surround amplifier

❶ Connect the Dolby Pro Logic Surround amplifier to the **AUDIO OUT L** and **R** at the back of your TV.

❷ Select **Centre mode Off** in the Setup menu, Speakers, see p. 8. The audio output is now independent of volume, bass, treble and Surround mode settings.

❸ Turn off the volume of the TV with the mute key 🔇.
All volume settings, tone control and speaker connections have to be done via the external Dolby Pro Logic amplifier.

21

To select connected equipment
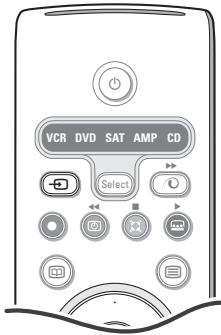
Equipment connected to the rear or on the right side of the TV

❶ Press the ⊟ key to select **AV1**, **AV2**, **AV3**, **AV4** or **Side**, according to where you connected your equipment at the rear or on the right side of your TV.

❷ Press the cursor up/down.

❸ Press **OK**.

If you want to change to TV channels?

Enter the channel number of the TV channel which you want to watch with the digit keys.

VCR Control keys

Most of the audio and video equipment from our range of products can be operated with the remote control of your TV.

Press the **VCR**, **DVD**, **SAT**, **AMP** or **CD** key according to the equipment you want to operate with this remote control. See Use of the remote control, p. 3.

VCR keys

After you pressed the **VCR** key, press one of the VCR keys of the remote control:

●   for record,

◀◀   for rewind,

■   for stop,

▶   for play,

▶▶   for fast forward,

- P +   for sequential channel selection from the videorecorder tuner,

0 to 9 to select a channel number from your video recorder tuner,

These keys function with devices that uses the RC5 signalling standard.

Record with your recorder

To record S-VHS quality, connect an S-VHS peripheral directly to the recorder.

Record a TV programme

You can record a TV programme using your recorder's tuner without affecting your TV.

❶ Select the channel number on your recorder.

❷ Set your recorder to record.
See the handbook for your recorder.

Switching channel numbers on your TV does not disturb recording !

Record from MONITOR OUT

You can record a programme on your recorder from the TV tuner via **MONITOR OUT**.

❶ Switch on the equipment.

❷ Select the correct channel on your TV and the correct input on your recorder.

❸ Set your recorder to record.
You record the tuner channel of the TV or the selected device (AV1 or AV2). Via AV3 or AV4 you record the tuner channel.

*Do not switch channels or switch off your TV when you are recording through **MONITOR OUT**.*

Before Calling Service

Please make these simple checks before calling service. These tips may save you time and money since charges for television installation and adjustments of customer controls are not covered under your warranty.

Symptoms	Items to Check and Actions to follow
"Ghost" or double images	• This may be caused by obstruction to the antenna due to high rise buildings or hills. Using a highly directional antenna may improve the picture.
No power	• Check that the television's AC power cord is plugged into the mains socket. • Unplug the television, wait for 60 seconds, then re-insert plug into the mains socket and switch on the television again.
No picture	• Check antenna connections at the rear of the television to see if it properly connected to the television input terminal. Is it properly secured to the appropriate antenna plug on the TV ? • Possible broadcast station trouble. Try another channel. Try running the Automatic installation. • Adjust the contrast and brightness settings. Try another smart picture setting. • Check the ⊟ key on the remote control to make sure the correct signal source is selected.
Good picture but no sound	• Increase the volume. • Check that the television is not muted, press the 🔇 key on the remote control. • When no signal is detected, the television automatically switches off the sound. This is proper operation and does not indicate a malfunction. • Check if your speaker configuration corresponds with the selections made in the Speaker settings, p. 8. • No sound from the rear speakers or the centre speakers ? Select an appropriate Surround mode, according to the broadcasted sound signal or adjust the volume (see surround modes, p. 12). • If you have attempted to hookup peripheral equipments, check the audio jack connections. • Check if the headphone is not plugged in. • Check if the channel is broadcasting good quality sound.
Good sound but poor colour or no picture	Adjust the contrast and brightness settings. Try another smart picture setting.
Poor picture	Sometimes, poor picture quality occurs when having activated an S-VHS camera or camcorder, connected ot the right side of your TV and another device is connected to **AV1** or **AV2** at the same time. In this case, switch off one of the other equipments.
Snowish picture and noise	Check the antenna connection.
Horizontal dotted line	• This may be caused by electrical interference (hairdryer, nearby neon lights, etc.) • Switch off the equipment.
One white line across the screen	Switch off the television immediately and consult a qualified service personnel.
Television not responding to remote control	• Check whether the batteries are working. Replace if necessary. • Clean the remote control sensor lens on the television. • Operating range between television and remote control should not be > 240". • You can still use the **M** key and the -/+ keys at the top of the TV. • Press the ⊟ key to be sure your remote control is in the TV mode.

If your problem is not solved:
Turn your TV off and then on again.

Never attempt to repair a defective TV yourself.
Check with your dealer or call a TV technician.

Tips

Care of the screen

Clean the TV with a slightly damp soft cloth. Do not use abrasive solvent as it can damage the TV screen.

End of life directives

We are paying a lot of attention to using environmentally-friendly production methods. Your new TV contains materials which can be recycled and reused.
At the end of its life specialized companies can dismantle the discarded TV to concentrate the reusable materials and to minimize the amount of materials that must be disposed.
Please ensure that you dispose of your old TV according to local regulations.

How to dispose of batteries?

The batteries supplied do not contain the heavy metals mercury and cadmium. Nevertheless in many areas batteries may not be disposed of with your household waste. Please ensure you dispose of batteries according to local regulations.

Glossary

Active Control

Measures and corrects incoming signals in order to provide the best picture quality settings.

AVL

Automatically controls the volume level to avoid too large level differences, especially during commercial breaks.

Display

An on screen message or graphics that help the user operate and adjust TV feature controls. See On Screen Displays (OSD).

DNR (Digital Noise Reduction)

By encoding signals digitally in 100 Hz sets, it is possible to clean up picture noise. This is especially beneficial in poor signal areas and when viewing poor quality video tapes.

Dolby Surround Pro Logic

Literally wraps you in 4-channel sound. it brings your favourite movies to life with all the realism and impact of cinema sound as though you are part of the action.

Hue

TV-function to modify the general colour balance between cool and warm and to adjust it according to your personal preference.

Menu

An on-screen listing of feature controls shown on the TV screen that are made available for user adjustments.

Picture and Sound Controls

Keys on the remote control to select predefined picture and sound settings.
The Eco picture mode is intended to lower power consumption of the TV and to improve picture quality of low quality digital sources.

Picture Freeze

TV mode which allows you to "freeze" a certain image in order to study a specific detail at ease, e.g. to make notes of certain programme information like phone numbers.

Programming

The procedure of adding or deleting channel numbers into the TV's memory circuits. In this way the TV 'remembers' only the locally available or desired channel numbers and skips over any unwanted channel numbers.

	34PT9421
Picture tube size	34" (860 mm)
Picture visible area	32" (801 mm)
TV system	3,58 NTSC / 4,43 PAL
Playback system	3,58 NTSC / 4,43 PAL
Antenna input	75 ohms - co-axial
Operating voltage, Frequency	Refer to the specifications at the back of the TV
Power consumption	Refer to the specifications at the back of the TV
Audio Output	4 x 15 W (left, right, centre, subwoofer)
Dimension: Width Height Depth	841 mm 664 mm 552 mm
Nett weight (aprrox. only)	70 kg

International guarantee conditions

This product is guaranteed by Philips for a period of one year after the date of purchase against defects due to faulty workmanship or materials. The guarantee covers both parts and labor.

Service under guarantee is only provided upon presentation of reasonable evidence (e.g. completed guarantee card or purchase receipts) that the date of the claim is within the guarantee period.
The guarantee is not valid if the defect is due to accidental damage (including in transport), misuse of neglect and in case of alterations or repair carried out by unauthorized persons.
The guarantee may not apply if the product requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized or if any damage results from these modifications.
Service (during and after guarantee) is available in all countries where this product is officially distributed by Philips. In countries where Philips do not distribute the product, the local Philips Service organization will also provide Service although there may be a delay if the appropriate spare parts and technical manual are not readily available.

These statements do not affect your statutory rights as a consumer.
In the event of difficulty please contact the Philips Information Centre in any country (see enclosed addresses).